BROCKMAN

BROCKMAN MINING AUSTRALIA PTY LTD

Submission in response to the Economic Regulation Authority Western Australia

Review of the method for estimating the Weighted Average Cost of Capital for the Regulated Railway Networks

Revised Draft Decision - 28 November 2014

20 February 2015

TABLE OF CONTENTS

1. Purpose and Context

This submission represents the response of Brockman Mining Australia Pty Ltd (**Brockman**) to the Review of the Method for Estimating the Weighted Average Cost of Capital (**WACC**) for the Regulated Railway Networks, Revised Draft Decision dated 28 November 2014 (**Revised Draft Decision**) prepared by the Economic Regulation Authority of Western Australia (**Authority**).

This submission supplements Brockman's 'Submission in response to the Authority's Draft Determination – Review of the method for estimating the Weighted Average Cost of Capital for Freight and Urban Railway Networks – 4 June 2014' dated 27 June 2014.

Brockman's primary interest in the Authority's methodology review of WACC is its impact on the Pilbara Infrastructure railway (**TPI Railway**), owned by The Pilbara Infrastructure Pty Ltd (**TPI**), a wholly owned subsidiary of Fortescue Metals Group Limited (**FMG**). Brockman supports refinement of the WACC methodology that is likely to deliver outcomes that properly incentivise TPI to provide access to its infrastructure in accordance with the Railways (Access) Code 2000 (**Code**) and the Competition Principles Agreement referred to under the Code.

2. Unreasonable outcomes arising from approaches adopted in the Revised Draft Decision

<u>The Revised Draft Decision has delivered a WACC for TPI that appears to be inflated, implying failure in the new methodology or application of the methodology.</u>

The Revised Draft Decision and historical determinations assess TPI WACC at levels materially higher than the Brookfield Rail determinations, as shown below:

Date	TPI Railway - Real pre-tax WACC	Brookfield Rail – Real pre-tax WACC	Premium (TPI Railway over Brookfield Rail)
30 June 2010	11.43%	6.32%	180.85%
30 June 2011	11.08%	6.14%	180.46%
30 June 2012	9.16%	6.87%	133.33%
30 June 2013	9.76%	7.00%	139.43%
30 June 2014 (5 June Draft new method)	11.90%	7.78%	152.96%
30 June 2014 (24 October Determination 2008 method)	**10.14%**	7.31%	138.71%
30 June 2014 (Revised Draft new method)	**13.30%**	8.02%	**165.84%**

The table highlights two issues of concern:

- the new method for estimating the WACC delivers materially higher WACC estimates than estimated by the Authority under the 2008 method:
    - TPI Railway 131% increase (13.30% versus 10.14%)
    - Brookfield Rail 110% increase (8.02% versus 7.31%)

  Notably, the most recent WACC estimates by the Authority are materially higher than its estimates in 2010 and 2011, during which global financial markets were experiencing the effects of the Eurozone debt crisis – even though interest rates have since fallen and economic conditions have improved.

- the new method affords TPI a premium over Brookfield Rail of 165.84%, which represents a material increase compared to the premium outcomes from the Authority's estimates under the 2008 method and the Authority's 5 June 2014 draft revised approach.

The material increase in Brookfield WACC outcomes between 30 June 2013 and 30 June 2014 (Revised Draft) and the different outcomes reported by the Authority using the new method as compared to the 2008 method demonstrate that the revised methodology is contributing to elevated WACC outcomes.

The material increase in the premium afforded to TPI Railway compared to Brookfield Rail, indicates the application of the new WACC methodology is disproportionately elevating the TPI outcome. The Brookfield Rail hauls commodities including iron ore in Western Australia and on these facts alone should be comparable at some level. The Authority has not established sufficient distinguishing differentiators between the systems to justify the premium being afforded to the TPI Railway.

In addition we note that Table 17 in the Revised Draft Decision shows the 'Estimates of the nominal and real grossed up return on equity in Australia from various services for various extensive periods between 1883 and 2012. Paragraph 458 states that "Historical data provides estimates of the average return on equity for the market. Given that the historic return on equity is mean reverting, or 'stationary', it is reasonable to use an average historic estimate to inform the future, particularly over the longer term such as the periods of the rail asset economic lives to which the rail WACC applied."

Table 17 presents mean estimates of the real return on equity of between 8.0% and 8.9%. This compares with outcomes of the Authority's revised methodology Table 33 which promotes draft determination inputs for the Real Pre Tax cost of Equity below that range for the PTA at 6.81% and modestly above that range for the Brookfield Rail at 9.82%, while the TPI is afforded a Revised Draft Determination regulated rate of 15.5% being 174% higher than the 8.9% top end of the range of historical returns listed in Table 17. While we appreciate that different asset categories will demand different equity returns, we submit an 80% premium is unwarranted for a regulated asset. We submit that this is further evidence that the Authority's proposed methodology as applied to the TPI Railway is flawed and provides cause for the Authority to carefully review their proposed methodology to address where the approach has failed to establish appropriate outcomes.

Brockman encourages the Authority to further consider the Revised Draft, specifically as it relates to the TPI Railway with a view of addressing areas in the methodology or the application of the methodology that are resulting in inappropriate elevation of TPI Railway WACC outcomes including divergence between TPI Railway and Brookfield Rail outcomes. We request the Authority specifically *reconsider its benchmarking sample, use of international comparators, exclusion of Australian based comparators, and reliance on small sub sets of any benchmark sample in the formulation of the Authority's final determination of WACC for TPI.*

3. Developments since prior submission

In relation to benchmarking selection, we note that Aurizon has completed a transaction with BoaSteel to acquire Aquila Resources Limited with a focus on providing a railway for that company's West Pilbara iron ore project. We contend that this adds further support to Aurizon being included in the TPI Railway benchmark sample.

In relation to the emphasis placed on stranding risk, we note TPI's continued resistance to the Brockman Access Application presents evidence that TPI chooses not to expand its rail haulage business outside its arrangements with its controlling entity FMG and related joint venture. Expansion of TPI's customer base, and increased utilisation of its infrastructure, would be an obvious way for TPI Railway to diversify and reduce its exposure to stranding risk. Increasing asset utilisation would be a rational response from a commercial operator that was genuinely concerned about stranding risk. Brockman submits that TPI Railway's decision to resist greater asset utilisation provides valuable insight into TPI Railway's true exposure to stranding risk.

We take issue with the additional words inserted in paragraph 206 of the Revised Draft Decision: "TPIs' current reliance on a small number of potential customers". The Authority should not give any regard to the 'current' customer base of TPI, as the Code is in place to establish efficient multi - user infrastructure. TPI Railway currently services its parent entity FMG and its joint venture partner. So it can be said that TPI Railway relies on a small number of customers at present. By assuming that this situation will persist into the future, the Authority undermines the policy objectives underpinning the Code.

The Authority's presumption of a small TPI Railway customer base, going forward, effectively entrenches TPI Railway's current position. By assuming that TPI Railway is exposed to high stranding risk, in part due to a limited customer base, the Authority effectively introduces an unhelpful circularity:

- The Authority <u>assumes</u> that, going forward, TPI Railway cannot diversify its customer base.
- This, in turn, has led the Authority to assume that TPI Railway faces very high stranding risk and that this risk should be reflected in the rate of return.
- This inflated rate of return would serve to push up the access price (all else being equal).
- An inflated access price serves to discourage access by third parties and undermines the prospect of third parties seeking access to TPI Railway's network.

Brockman submits that the Authority's decisions should not hinder or dissuade access by third parties to TPI Railway's infrastructure in this way. Instead, the Authority should seek to break this unhelpful circularity by considering at the outset that a properly administered access regime would encourage entry by access seekers, and that this would serve to lower TPI Railway's risk exposure by broadening its customer base.

In relation to stranding risk, we note the extraordinary efforts the Roy Hill project are advancing through the development of a new railway system that effectively duplicates the TPI Railway. This development suggests strongly that there is significant excess demand for rail services in the Pilbara, and is evidence that claims of TPI Railway stranding risk are overstated.

Furthermore, Brockman notes recent market events provide an excellent natural experiment that allows the Authority to test TPI Railway's true exposure to stranding risk. Specifically, whilst the market price of iron ore has experienced significant volatility, and dropped very significantly, recently, a number of mining companies have announced continued expansion in iron ore production in WA.[1]

The iron ore price has hit six year lows in the early part of 2015. FMG, which owns TPI Railway, announced in January that it intends to maintain its 2015 financial year production guidance of between 155 million tonnes and 160 million tonnes. [2] In addition, Fortescue's chief executive Nev Power announced recently that despite the falling iron ore price the group remains profitable. FMG attributed this maintenance of profitability to sustained cost reductions and productivity and efficiency improvements. This demonstrates that it is possible for FMG (and its subsidiary TPI Railway) to maintain viability, even in the face of a sharp downturn in the iron ore price, by changing strategy and by generating efficiencies. The Authority should encourage, through its determinations, further efficiency improvements rather than simply assuming that TPI Railway has little or no control over its circumstances, including over its risk exposure.

Furthermore, the fact that FMG has been able to weather recent market developments, and that other mining companies are expanding production rather than scaling back output, suggests that claims of TPI Railway stranding risk are exaggerated significantly. The Authority should reassess its view about the riskiness of TPI Railway.

We request the Authority considers these developments in its final determination.

4. The focus of this submission

The material changes from the previous determinations that we focus on in this submission are:

- The term of the WACC;
- the method for estimating the debt risk premium (chapter 9); and
- the method for estimating the market risk premium (chapter 11).

This submission aims to draw attention to the apparent inconsistencies in the Authority's approach to the regulated railways as compared to each other and as compared to other regulated assets. It is not appropriate that the Authority:

- has assumed that 10 years is the appropriate term for the WACC that the Authority must determine for regulated railways;
- is considering a Debt Risk Premium for the TPI railway that appears consistent with the heavily geared FMG group, but at the same time is considering lowering the theoretical gearing level, substantially below those being achieved by the FMG group that includes TPI;
- has assumed a bare investment-grade credit rating for TPI Railway (which in turn has led to an inflated estimate of the Debt Risk Premium); and

1 See, for example: *Rio Tinto brings on Pilbara iron ore expansion ahead of schedule*, Australian Mining, 14 May 2014; *Iron ore miners' war of attrition*, Business Spectator, 25 August 2014; *BHP Billiton to cut costs of Australian iron ore operations*, ABC News, 7 October 2014.

2 Fortescue Metals Limited December 2014 Quarterly Report, page 3 ,'Forecast Production and Costs'

- is considering applying a Market Risk Premium to regulated railways that is materially different from the Market Risk Premium it has proposed, contemporaneously, to apply to regulated gas assets.

In addition, this submission revisits and reiterates several issues in relation to the Authority's beta estimate for TPI, which were raised by Brockman in its submission in June 2014, but have not been addressed by the Authority in the Revised Draft Decision.

We request the Authority reconsider and address these issues prior to finalising its review.

5. Term of WACC

In its 7 February 2013 Issues Paper – WACC Determination, the Authority noted:

- In paragraph 107, "Consideration must be given as to whether the Authority continues to apply a ten year term to railway networks or adopts a five year term as it has for gas and electricity networks;" and

- In paragraph 110, "the risk free rate observed from a security with a 5 year term to maturity is generally lower than the risk free rate obtained from a security with a 10 year term to maturity.'

The Authority's starting point for consideration of the appropriate term of the WACC is the requirement in the Code that "…WACC is the target long term weighted average cost of capital appropriate to the railway infrastructure". Brockman agrees that the Code requires the Authority to determine a long term WACC for the purposes of determining floor and ceiling prices. However, the term assumed for the purposes of establishing the floor and ceiling prices is unlikely to be relevant to the term of access agreements negotiated between TPI and access seekers.

As the Authority noted in the ATCO Gas Draft Decision, its view is that the relevant WACC term for gas access arrangements is the length of the regulatory period, five years, notwithstanding that gas pipeline assets have expected asset lives that are considerably longer than a single regulatory period.[3] At the end of each regulatory period, the terms of the access arrangement (including the rate of return that should apply) are reset in a way that is analogous to the periodic renegotiation of a rail access agreement. By the Authority's own reasoning, the WACC term that would be relevant to any commercial negotiations between TPI Railway and access seekers would be the term of the access agreement.

In addition, Brockman notes that TPI Railway's parent seems to arrange its debt finance using five year cycles, so at least its debt capital has a five year term. For instance, FMG's most recent senior secured credit facility arranged in October 2012 for US$5 billion and representing the majority of FMG's current debt burden was initiated with a five year term. This is significantly less than the 10 year term assumed by the Authority, and is consistent with the term assumed in the ATCO Gas Draft Decision.

In summary, on the face of it, there may be some tension between (a) the Code requirement for the Authority to produce a long-term estimate, and (b) the practical reality that access arrangements are unlikely to have parameters fixed for very long terms. This tension can be reconciled by considering 10 years to represent the "long term" and then setting about estimating required returns over the next 10 years.

---

[3] In the 14 October 2014 ATCO Draft Decision, Table 58 notes Authority's determined asset life for the regulated gas assets, with 40 years applied to buildings, 20 years applied to mains, and 15 to 25 years applied to service pipes.

As Brockman explains in section 7 of this submission, this is precisely what the Australian Energy Regulator (AER) does for gas and electricity distribution, and the AER's approach for estimating the 10 year MRP is much closer to the Authority's 5 year MRP in the ATCO Gas Draft Decision than its 10 year MRP in the Revised Draft Decision.

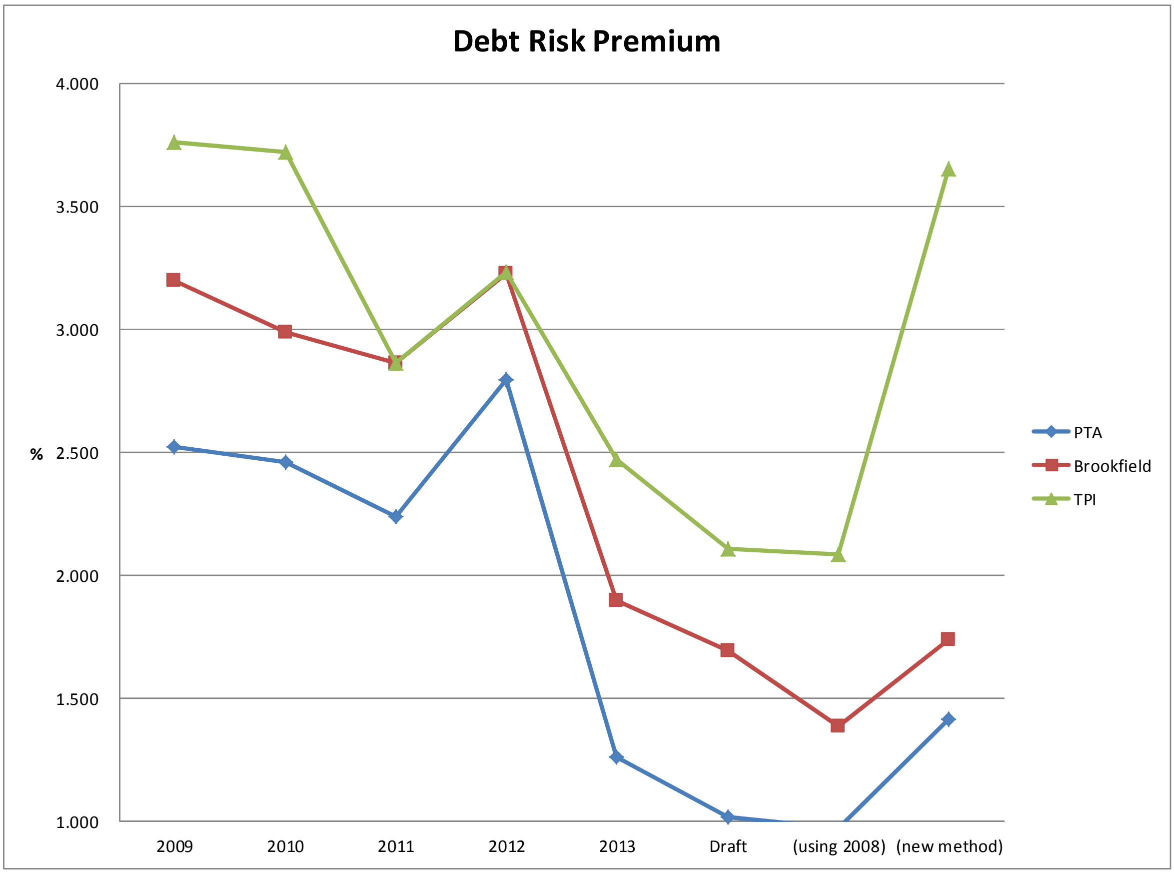
A key point is that the Authority uses a 10 year risk-free rate, but does not specify the term for the MRP. Under the above approach, the Authority could interpret the MRP term to be 10 years (which would be consistent with the term used for the risk-free rate and with the practice of the AER). The Authority could then use the same techniques and evidence as is used in the ATCO Gas Draft Decision, without relying exclusively on a single approach (e.g. the Wright approach). This, would go a long way towards producing a more plausible and consistent WACC estimate in relation to TPI Railway.

We request the Authority reconsider its assumption that the appropriate term for the WACC is 10 years.

6. Debt Risk Premium – credit rating and gearing levels

We present below a table and graph of the outcomes of recent Authority WACC Determinations to demonstrate the anomaly of the outcomes for TPI Railway under the proposed new approach. We do not accept there is sufficient evidence to support the material difference in outcomes in the Revised Draft Decision, with the TPI debt risk premium increasing 48% from 2013, while the premium for Brookfield has reduced 8% for the same period. The material increases in the outcomes relating to all three railways between the 2014 Determination using the 2008 methodology compared to the Revised Draft Decision outcomes also raises concern for us in the changes proposed by the Authority.

Debt Risk Premium	Determination					2014	2014 Det.	Revised Draft	Increase from	Increase from
	2009	2010	2011	2012	2013	Draft	(using 2008)	(new method)	2008 method	2013
PTA	2.520	2.460	2.236	2.797	1.260	1.015	0.971	1.417	**45.9%**	**12.5%**
Brookfield	3.200	2.990	2.861	3.223	1.900	1.691	1.388	1.740	**25.4%**	**-8.4%**
TPI	3.760	3.720	2.861	3.234	2.470	2.107	2.084	3.652	**75.2%**	**47.9%**



Evidence from the Authority's own sample supports a BBB+ credit rating assumption

A key determinant of the Debt Risk Premium is the Authority's credit rating assumption. Had the Authority assumed a credit rating for TPI Railway of BBB+, it would have (based on its own analysis) determined a Debt Risk Premium for TPI of 1.740% rather than the figure it actually determined, based on a BBB- assumption, 3.652%.

The Revised Draft Decision benchmark credit rating range for the TPI Railway of BB- to BBB- is both implausible and inappropriate for a regulated business. A BBB- rating is being achieved by FMG (which includes TPI) which faces credit issues including, the inherent risk of the mining operations and the gearing exposure of the entire FMG group (56% according to FMG's 21 October 2014 Investor Presentation – see page11 of this submission for an extract). The credit rating of FMG reflects the average creditworthiness of the whole group's various activities. TPI Railway and (specifically, the below-rail activities of TPI Railway) is likely to be more credit worthy than the average activity/division within FMG as a whole.

Assuming (as the Authority has done) that TPI Railway's creditworthiness going forward will be the same as it is now, does not allow for possible risk diversification available to TPI Railway through servicing other producers. In this regard, we note the extraordinary length Roy Hill is currently going to, in effectively duplicating the TPI Railway to deliver its 55Mtpa Roy Hill mine to market. This demonstrates a clear failure of the Authority in achieving the very object of the Code in relation to the TPI Railway.

The table below reproduces the credit ratings of the firms the Authority analysed as comparators to TPI Railway. The Authority's own sample of comparators to TPI Railway suggests a credit rating range of BB- to A, which is considerably wider than the range of BB- to BBB- adopted by the Authority. Well over two thirds (i.e. five out of seven in total) of the comparators in the Authority's own sample had ratings better than the range adopted by the Authority.

Comparator	S&P Credit rating
Canadian National Railway	A
Union Pacific Corporation	A
CSX Corporation	BBB+
Norfolk Southern Corporation	BBB+
Canadian Pacific Railway	BBB
Kansas City Southern	BBB-
Genesee & Wyoming Inc.	BB-

All seven comparators are international comparators. We note that in the Revised Draft Decision paragraph 131, the Authority concluded that expansion of the boundaries to allow international data has potential for error. Paragraph 162, noted "that overseas rail operators will possess a higher level of risk, relative to an Australian railway operator".

Beyond the issue of the focus on international comparators, it is clear that the Authority has interpreted its own evidence very selectively and inappropriately. At paragraph 300, the Authority states that it "…considers that the most appropriate comparators for TPI are the overseas railway operators Genesee & Wyoming Inc. and Kansas City Southern as both companies have comparable gearing levels, and both are considered to have similar levels of risk to that of TPI."

By the Authority's own acknowledgment, the assumption of a BB- rating (i.e. that of Genesee Wyoming Inc.) is unacceptable because it is below investment grade (and also below FMG's actual credit rating). This observation itself should call into question the Authority's claim that Genesee Wyoming Inc. is the most appropriate comparator to TPI Railway.

The Authority, therefore, selected a comparator, Kansas City Southern, with the next best credit rating (BBB-). In doing so, the Authority asserted that Kansas City Southern is considered to have a similar level of risk to that of TPI Railway, but provided no analysis or evidence to support this assertion.

The Authority has erred by effectively ignoring a wider sample of evidence and focussing selectively on the rating of a single firm, based on erroneous and untested assumptions about TPI Railway's risk profile. When determining a credit rating assumption for the benchmark entity, the Authority has made use of comparator analysis in a very peculiar way. It has assembled a sample of seven companies (none of which are Australian firms) that it describes are comparators to TPI Railway. Then, it selects from this sample just two firms (which have the poorest credit ratings) as the most comparable to TPI Railway. In doing so, it discards altogether any information contributed by the remaining five firms. The usual practice in such exercises is to make use of information on all of the comparators identified. (If some of the firms are not genuinely comparable to the firm of interest, they should not be described as comparators in the first instance.) It may be reasonable to weight some comparators more than others, but it is highly unusual to disregard altogether over 70% of the sample. To the extent that any of the firms are dropped, they should be outliers from the sample.

In this instance, the Authority appears to have selected as most appropriate the outliers. The Authority's own comparator sample suggests that a more suitable rating for TPI Railway is BBB+ as this falls between the credit range implied by the Authority's sample (i.e., as the table above shows, BBB+ is the 'median' rating based on the sample proposed by the Authority). It is worth noting that a BBB+ rating is consistent with Aurizon's credit rating. As an Australian multi-user railway provider, and a transporter of bulk freight in Australia, Aurizon represents a better comparator to TPI Railway than the international comparators considered by the Authority.

We ask the Authority to reconsider its conclusion on the credit rating based on a re-examination of the evidence suggested by its own comparator sample. Further, we request that the Authority consider properly our contention that Aurizon represents a closer comparator to TPI Railway than overseas comparators.

Perverse incentives and outcomes created by the Authority's determination

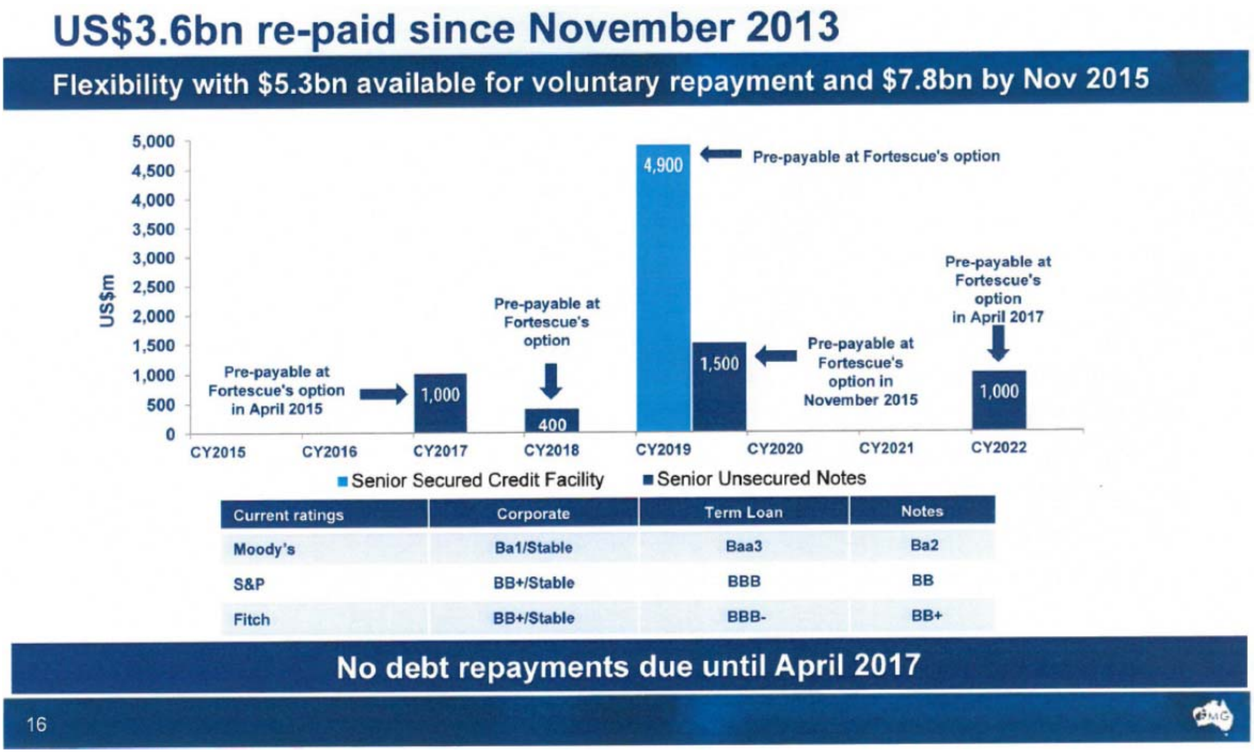
The Authority's adoption of a BBB- credit rating, which is barely investment grade, creates perverse incentives for TPI Railway to not maintain a strong credit rating. Most businesses do have the ability to maintain creditworthiness (e.g. by not taking on excessive amounts of debt, managing their cash flows, and by not pursuing excessively risky business strategies). There is a direct link between businesses' creditworthiness (which may be indicated by its credit rating) and borrowing costs. Generally, the less creditworthy the business, the higher will be its borrowing costs, all else being equal. From an efficiency point of view, it is good regulatory policy for regulators to provide incentives for regulated businesses to improve and maintain a strong level of creditworthiness in order to minimise borrowing costs. It would be inefficient for a regulated business to allow its creditworthiness to deteriorate, or to maintain a poor level of creditworthiness, if it can in fact take steps to improve its level of creditworthiness. This is because by improving its creditworthiness, it could lower its cost of borrowing, and these savings could ultimately be passed back to customers through lower prices.

The Authority has an important role to play in creating incentives for access providers (e.g. to rail infrastructure) to maintain an acceptable level of creditworthiness because the credit rating assumed by the Authority influences directly the return on debt that the business is allowed to earn. If the Authority assumes too weak a credit rating (i.e. a rating that is below what the benchmark efficient entity ought to be able to achieve), the access provider would be awarded too high a return on debt. This would provide perverse incentives for the access provider to allow its creditworthiness to drop below an efficient level and, therefore, for its cost of borrowing to rise above the efficient level. If the Authority were to assume a credit rating that is commensurate with what a truly efficient benchmark entity could achieve and maintain (which may in principle be higher than the access provider's present rating level), and if the Authority were to set return on debt allowances in line with that assumed rating, the Authority would provide desirable incentives for the access provider to improve and maintain an efficient cost of borrowing. This would support the incentive objectives of the Code.

It is precisely for this reason that regulators do not strive to match the assumed credit rating of regulated businesses to actual ratings – doing so would weaken incentives for efficiency improvements. Typically, regulators apply credit rating assumptions that are comfortably investment grade in part to incentivise regulated businesses to take steps to ensure they remain sound financially, to discourage excessive risk-taking, and to maintain efficient borrowing costs. Regulated monopolies should not be rewarded for taking unnecessarily high risks, the costs of which would ultimately be borne by customers.

More specifically, the fact that a particular mining company faces financing issues that affect its credit rating should be irrelevant to the exercise of determining an allowed rate of return for that mining company's subsidiary. Rather, the allowed rate of return should be based on the risk profile of an efficient benchmark railway. Whilst the Authority's Revised Draft Decision makes notional reference to a benchmark efficient entity, for the purposes of determining the WACC, the Authority simultaneously refers to the actual risks faced by TPI Railway. This is inconsistent, and has contributed to the Authority's unreasonably high WACC estimates for TPI Railway.

FMG commercial decisions have driven its current higher gearing levels, which in turn impact on the FMG credit rating and drive a high Debt Risk Premium. Presented below is an extract from the FMG Investor Presentation dated 21 October 2014 which has been sourced from the ASX web site. It shows the actual FMG credit ratings.



Current ratings	Corporate	Term Loan	Notes
Moody's	Ba1/Stable	Baa3	Ba2
S&P	BB+/Stable	BBB	BB
Fitch	BB+/Stable	BBB-	BB+

In its recent Draft Decision in relation to regulated electricity and gas networks in NSW and ACT, the AER applied a benchmark credit rating assumption of BBB+, which is comfortably investment-grade, irrespective of the networks' actual credit rating. In doing so, it determined a debt premium for the networks of 2.96%, which is materially lower than the 3.652% Debt Risk Premium determined by the Authority for TPI Railway.

More importantly, however, the Authority's apparent assumption that TPI Railway has significant risk exposure and that any such risk cannot be managed through various means, creates a perverse circularity. By simply assuming a high level of risk for TPI Railway, the Authority effectively entrenches this high risk. The high Debt Risk Premium for TPI Railway follows from the Authority's assumed credit rating. This inflates the WACC above a level that is reasonable, pushes up the access price and serves to discourage access seekers. The dissuasion of access seekers removes a key method by which TPI Railway could reduce its exposure to risk: diversification of its customer base. (One of the key reasons the Authority gives for its assumption that TPI Railway faces significant risk is that TPI Railway "serves a limited number of customers".)

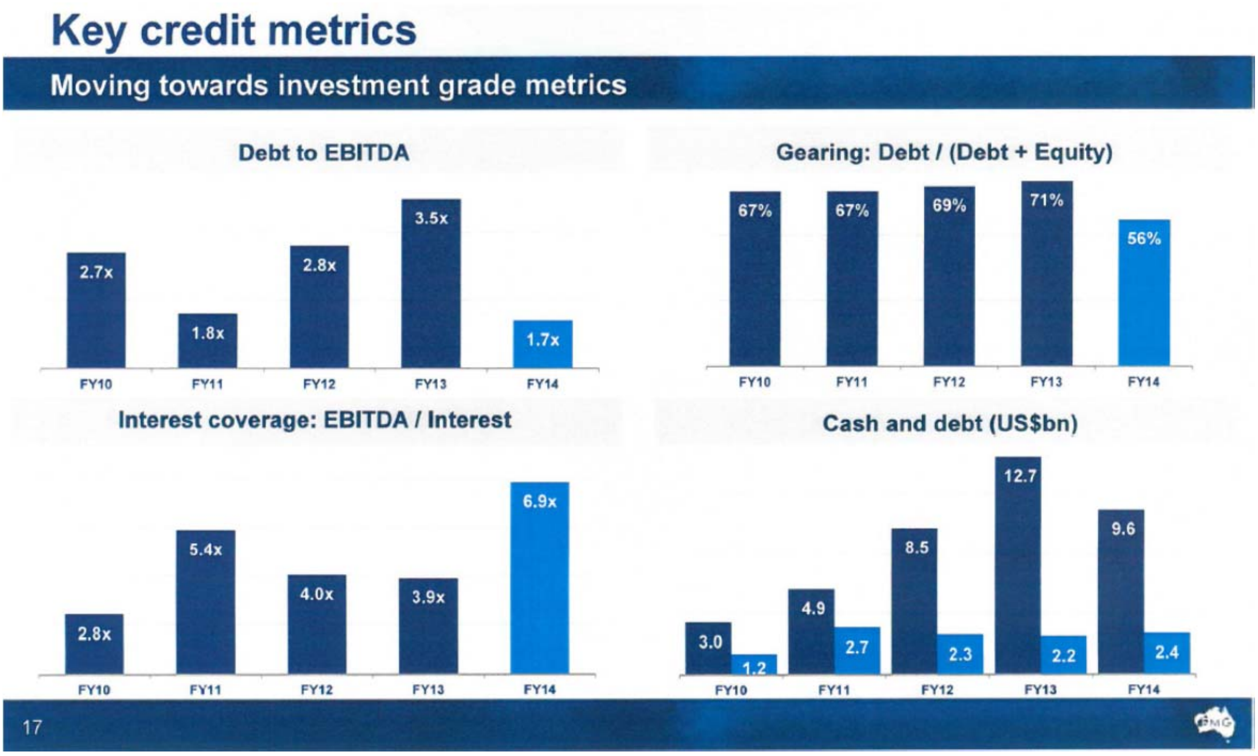
In Brockman's view, it is an important role of the Authority to break this type of circularity by not adopting assumptions that entrench TPI Railway's current circumstances. Rather, the Authority should consider what practice would be adopted by an efficient benchmark entity (e.g., what credit rating would be maintained by an efficient benchmark entity). The practice of an efficient benchmark entity would be consistent with what would likely occur if the rail access regime were to operate as intended, by facilitating fair access to rail infrastructure, and expansion and diversification of TPI Railway's customer base.

We request that the Authority, in its final determination, specifically consider its outcomes of credit rating and gearing levels against the actual levels achieved by the FMG group, on the basis that the TPI Railway regulated credit rating and gearing levels should in all cases be superior for a multi user infrastructure provider to that of a single iron ore miner (i.e. higher gearing level and lower debt rating). In making this assessment we ask the Authority to ensure that its determinations relate to risks faced by the benchmark efficient entity rather than the risks faced currently by TPI Railway.

Inconsistency between credit rating and gearing assumptions adopted by the Authority

In addition to our concern with the proposed comparator approach employed by the Authority, we consider the outcomes for the TPI Railway indicate that the Authority's Revised Draft Decision does not achieve internal consistency between WACC parameters. Specifically we note inconsistencies in the TPI Railway Revised Draft Decision outcomes for the credit rating and the gearing level, and also between the GRV concept and the gearing level arrived at in the Revised Draft Decision.

Presented below is an extract from the FMG Investor Presentation dated 21 October 2014 which has been sourced from the ASX web site. It shows the actual FMG gearing levels.



The gearing level adopted in the Revised Draft Decision is 20% which is materially lower than the actual debt level of the FMG group (inclusive of TPI). It seems very likely that the FMG credit rating would be materially better, and its Debt Risk Premium materially lower, if its actual gearing levels were 20%. Furthermore, given that TPI Railway is likely to be more creditworthy than the average component of FMG, it is likely to be able to support a higher gearing than FMG as a whole.

The credit rating adopted in the Revised Draft Decision (BBB-) is consistent with the actual credit rating assigned to the entire FMG group (Term Loan BBB-). (This notwithstanding the Authority's explicit rejection of arguments that the benchmark credit rating for TPI Railway should reflect FMG's credit rating at paragraph 277). Yet the gearing level of FMG is materially higher than the 20% applied by the Authority to TPI Railway. This inconsistency between the two parameters has material ramifications for WACC. It indicates that the current methodology does not provide adequate regard to ensuring consistency between debt drivers of the Debt Risk Premium and, therefore, the WACC.

Further, the application of a low gearing level (20%) is inconsistent with the concept of new infrastructure implied by the gross replacement value (**GRV**) concept employed with WACC to establish floor and ceiling prices. That is using GRV for the asset base implies 'new' infrastructure. New infrastructure typically commences life with higher gearing levels. We recommend this be provided weight in consideration of the appropriate gearing level. Possibly WACC benchmarking sample inputs should be more focussed on GRV or 'new' infrastructure comparatives to recognise the impact of GRV and the association of new assets with higher gearing levels.

There is risk of inconsistency in outcomes if gearing levels and credit rating are estimated in isolation to one another, as they appear to have been done in this instance.

We request the Authority consider the link between the credit rating, the gearing level and the link between gearing level and the GRV concept, and addresses these matters in the final determination.

7. Market Risk Premium

Historically the MRP employed by Authority has been 6% and this position appears to be supported, as noted in paragraph 479 of the Revised Draft Decision which referenced a Grant Samuel report dated 3 March 2014 stating that they 'adopted a market risk premium of 6% and believes that this continues to be a reasonable estimate', and in paragraph 485 which states that the, 'AER (in December 2013) … adopted: … a range for the MRP of 5.0% to 7.5%,…with a point estimate of the MRP of 6.5%...'.

In the Authority's ATCO Gas Draft Decision, published on 14 October 2014, the Authority determined a MRP range of 5% to 7.5%, and settled on a point estimate of 5.5%. Just a few weeks later, the same Authority has issued a substantially higher view of MRP in this Revised Draft Decision for the regulated railways, being 7.87%, which is notably above the upper end of the range "of outcomes … the Authority considered fit". It is also notably higher than the 7.1% ATCO sought in paragraph 584 of the ATCO gas 14 October 2014 publication, which as a regulated asset owner, ATCO was seeking to increase the MRP applied to improve their regulated return.

It is very surprising that the Authority can simultaneously have two different views on a generic (economy-wide) parameter like the MRP. It is equally surprising that the estimates that the Authority has determined in the two Draft Decisions are so starkly different (i.e. they are approximately 240 basis points apart).

It seems that this very substantial difference may be explained by the fact that in the ATCO Gas Draft Determination the Authority was aiming for a five year WACC term, and in the Revised Draft Decision for regulated rail assets the Authority aimed for a long-term (i.e. 10 year) WACC.

Brockman has already set out above why it considers the Authority's assumption of a 10 year term is inappropriate. Notwithstanding that point, it seems that Authority has erred in at least two more ways in respect of the Market Risk Premium:

Firstly, in an attempt to estimate a long-*term* MRP, the Authority has adopted an estimation technique (the so-called 'Wright method') that makes use of very long-*run* historical data (on equity returns to the market). Making use of long-*run* historical data does not necessarily ensure a good estimate of a long-*term* MRP. The Authority seems to have confused two distinct concepts (i.e. the term of the WACC and the length of period over which historical data should be assessed in order to derive estimates).

Secondly, in the ATCO Gas Draft Decision, the Authority combined estimates from a range of techniques and sources to derive its MRP estimate. This is also the approach used by the AER, IPART and other regulators when estimating the MRP. Such an approach is appropriate in that the combining of uncertain estimates using different sources, data and methodologies reduces the statistical 'noise' surrounding the final estimate, thereby improving the robustness of those estimates. By contrast, in the Revised Draft Decision the Authority discards the range of approaches used in the ATCO Gas Draft Decision and relies on a single technique (the Wright method) to derive its MRP estimate. Doing so increases greatly the risk of estimation error.

Further, we note that even if the Authority is correct in seeking to estimate a long term MRP, for application to regulated rail assets, its estimate of approximately 7.9% seems implausibly large. By way of comparison, the Australian Energy Regulator aims to "…estimate a 10 year forward looking return on equity using an estimate of the 10 year forward looking MRP".[4] Brockman notes that the AER's estimate of the "10 year forward looking MRP", which was 6.5% in the AER's November 2014 Draft Decisions for NSW and ACT electricity networks, is closer to the Authority's MRP estimate in the ATCO Gas Draft Decision (5.5%) than the Authority's MRP estimate in the Revised Draft Decision (7.9%).

Finally, Brockman notes that the main techniques that the AER uses to estimate the MRP are similar to those used by the Authority in the ATCO Gas Draft Determination – namely, examination of long-run averages of historical excess returns on the market, and estimates using Dividend Growth Models. It is not possible to use long-run averages of historical excess returns to generate separate estimates of the MRP of different terms; the AER describes its estimate of the MRP using long-run averages of historical excess returns as a 10 year MRP. Similarly, the Dividend Growth Model delivers MRP estimates that embody investment terms of infinite horizon, so such MRP estimates could be described as long term estimates.

The Authority should recognise this and, in doing so, interpret the estimates derived using the techniques it applied in the ATCO Gas Draft Decision as long-term MRP estimates. In other words, there is no need for the Authority to abandon altogether the techniques in the ATCO Gas Draft Decision, and replace those exclusively with the Wright approach, in order to produce a long-term MRP estimate.

We seek for the Authority to reconsider its approach to MRP in its final determination and align its position on MRP, and use the techniques it applied in the ATCO Gas Draft Decision, in order to estimate an appropriate MRP for the Final Decision.

8. Continued interest in response to issues identified in prior submission – Benchmark selection and Beta

Issues raised by Brockman in response to the Draft Decision that have not been addressed in the Revised Draft Decision

In our 27 June 2014 submission to the Authority, we raised several issues in respect of the Authority's estimate of TPI's beta. Specifically, we requested that the Authority:

[4] AER, Rate of return guideline: Explanatory statement, December 2013, p.82.

- *explain how the Authority's asset beta estimate is supported by its own estimates of asset beta for its own set of comparators in Figure 1 contained in our June 2014 submission;*

- *explain why the Authority dismissed the wealth of international comparators in favour of a tiny sample of domestic comparators in its ATCO Gas Draft Decision, but has entirely dismissed the domestic comparators in favour of at most two international comparators in its Rail Draft Determination;*

- *explain what consideration was given to the material difference in asset betas between the Brookfield Rail and the TPI Railway, United States benchmark group and the Brookfield Rail comparative groups in Canada, Australia and New Zealand;*

- *explain what weight has been applied to each of the seven international comparators in order to produce the final asset beta estimate of 1.25. It should also explain why those weights were adopted;*

- *explain why beta estimates are based entirely on Friday-to-Friday returns. It should also explain whether the variation in beta estimates caused simply by changing the day of the week on which returns are measured causes the Authority to question the reliability of those estimates;*

- *explain whether the Authority considers it possible that the true systematic risk has varied to the extent shown in Figure 3 in our June 2014 submission – or whether Figure 3 demonstrates that beta estimates can vary materially from true systematic risk;*

- *explain why no weight is applied to the monthly beta estimates;*

- *recognise that an equity beta of 1.56 can only be justified by (a) using the two specific companies GWI and KCS – no more, no less, and (b) using the specific five-year period considered by the Authority, and (c) using weekly data, and (d) using Friday-to Friday returns – and that any variation at all to any of these choices results in a material reduction in the beta estimate;*

- *explain whether the Authority considers TPI and Brookfield to be in the same, or different risk classes. If they are in different risk classes, the Final Determination should explain how the same firm can be a comparator for two different risk classes;*

- *explain why "only overseas railway operators are able to adequately capture the risks faced by the TPI rail network";*

- *reconsider, or properly explain, any decision to exclude Aurizon from the TPI benchmark sample of comparable firms;*

- *quantify the risk of customers leaving TPI, explain the extent to which that risk is mitigated by long-term take-or-pay contracts, and the extent to which that risk is considered systematic. The ERA has accepted that contractual arrangements may influence risk "within a range" but has made no effort to quantify the effect of different contracting models. By making no adjustment for the strong likelihood that TPI could reduce the risk associated with its network, by adopting different contractual arrangements, the Authority appears to have simply accepted the status quo. This serves only to entrench further TPI's position of monopoly, and fails to incentivise TPI to find more efficient, risk-mitigating contractual arrangements;*

- *explain how each of the seven comparators that have been identified for TPI is more comparable to TPI than is the CQCN; and*

- *explain the basis of any diversion from the benchmark sample (having regard to our preference for inclusion of suitable Australian comparators) and also assess consistency between gearing level and beta determinations.*

Brockman urges the Authority to address these issues in its final WACC determination. Brockman submits that the Authority should:

- increasingly tie the TPI Railway WACC determination with Australian based railways and in particular with Aurizon and the Brookfield Railway;

- recognise that its beta estimates are highly sensitive to the modelling assumptions employed. This in turn should lead the Authority to recognise the significant uncertainty around its beta estimates, and to err on the side of caution by moderating the very high beta estimates for TPI Railway;

- increase incentives for TPI Railway to find ways to manage its risks (e.g. by entering into commercial haulage arrangements, thereby diversifying its customer base and income streams, and/or employing risk-mitigating contractual arrangements); and

- increase confidence for junior iron ore developers in the Pilbara to pursue the regulated access process.

Reliability of the comparator sample proposed by the Authority when estimating TPI Railway's beta

Brockman has strong reservations over the appropriateness of the comparator sample used by the Authority to estimate TPI Railway's beta. These reservations relate to:

- the size of the sample;

- the lack of any Australian comparators (and the lack of analysis to justify the appropriateness of the overseas comparators); and

- the lack of focus on comparators with characteristics that reflect 'below rail' activities.

Firstly, the Authority relies on just seven comparators upon which to derive its beta estimate for TPI Railway. In Brockman's view, this is a very small sample. Ideally, the sample should be expanded to include more comparators, with appropriate characteristics that drive the risk associated with the assets in question. But, at the very least, the Authority should recognise that beta estimation is a difficult task that is prone to error, and that the risk of estimation error increases with small samples.

Secondly, as the Authority itself notes in paragraph 162 "… overseas rail operators will possess a higher level of risk, relative to an Australian railway operator." This suggests that the comparator sample identified by the Authority is likely to overstate TPI Railway's beta. Notwithstanding this, the Authority has chosen an asset beta for TPI's Railway that is:

- at "…the upper end of the 95 per cent confidence interval of the asset beta for Genesee & Wyoming Inc."; and

- within "the 95 per cent confidence interval for each of the regression estimators for Kansas City Southern".

The Authority's estimate is unreasonable because (as with the evidence on credit ratings) it is based on a very selective interpretation of all the evidence available. According to the Authority's own analysis (Table 25), Genesee & Wyoming Inc. and Kansas City Southern are the riskiest operators in its TPI Railway comparator sample. Yet, the Authority seems to have used these two operators to gauge the reasonableness of its beta estimate. Notably, the Authority's asset beta estimate of 1.25 is greater than the point estimate for any of the comparators in the sample (with the exception of the point estimate for Kansas City Southern, 1.38), and significantly greater than the sample average (1.00).

The likelihood that the current sample has overstated TPI Railway's beta is increased by the fact that no Australian rail operators are included in the comparator group used to estimate TPI Railway's beta. This is despite the Authority's acknowledgment that overseas operators likely face more risk than Australian operators (because American and Canadian railway operators for example are expected to face higher degrees of competition from alternative forms of transportation, such as roads).

Finally, the Authority has failed to recognise that the beta it should be striving to estimate is the beta of a standalone 'below-rail' operator, since the focus of the access regime is the below rail infrastructure. Yet, all of the comparators within the TPI Railway sample appear to be engaged in 'below-rail' and 'above-rail' activities. This means that the overall beta estimates for each of the comparators will be a blend (i.e. a weighted average) of the systematic risks associated with the below-rail and above-rail activities of each operator. It is reasonable to infer that above-rail activities are likely to be more risky than below-rail activities. As such, the overall betas for each comparator are likely to overstate the below-rail betas.

In practice, it is very difficult to find a sample of pure-play (or even near pure-play) below rail operators. In such circumstances, the usual practice is to identify comparators that are not necessarily drawn from the same industry but, rather, share characteristics that are likely to share the same risk drivers as the assets in question. Firms in infrastructure dominated, natural monopoly industries are likely to have similar risk drivers to below-rail assets. Examples of such infrastructure-based industries include:

- electricity networks;
- gas networks;
- water networks;
- ports;
- airports;
- roads; and
- other infrastructure firms.

The Authority included comparators from some of these industries (e.g. a port operator, an airport and some infrastructure firms) in the comparator sample for Brookfield Rail. The Authority should expand the comparator sample relevant to TPI Railway by identifying and including firms from the industries noted above.

When estimating TPI Railway's beta, the Authority should not focus its estimates on one or two firms within the sample that appear to be outliers. Rather, the Authority should take account of evidence provided by the entire sample. Further, the Authority should expand its comparator sample to include Australian rail operators such as Aurizon, as well as firms from infrastructure-dominated industries (such as energy networks, water networks, ports, airports and road operators).